To: Costa, Dan[Costa.Dan@epa.gov]; Vette, Alan[Vette.Alan@epa.gov]
From: Miller, Andy
Sent: Wed 6/7/2017 9:06:51 PM
Subject: FYI: EPA's Scott Pruitt wants to set up opposing teams to debate climate change science

Dan, Alan:

This just came out a few hours ago. My initial impression is to back the effort, but only if everyone is playing by the same rules. I need to give this some additional thought, but this could have some real value, IF the red (skeptic) team has to bring to the table the same quality of science that we are required to use. I don't think this overrides this issue about having a series of dialogs, but it's along the same vein.

I don't know whether there is any interest from the OA about our position on this, but I think Bob and Bruce need to be prepared to respond. I'll work on something and send it to you to look over.

Andy

EPA's Scott Pruitt wants to set up opposing teams to debate climate change science

By Jason Samenow By Jason Samenow

Capital Weather Gang

June 7 at 2:14 PM

Multiple scientific assessments have concluded that man-made climate change is real and poses risks to human health and the environment. Even so, Scott Pruitt, the Environmental Protection Agency administrator, told Breitbart News on Monday that he would like to essentially re-litigate the science of climate change.

In an interview with Breitbart's Joel Pollak, Pruitt proposed setting up opposing teams to debate key climate science issues.

"What the American people deserve, I think, is a true, legitimate, peer-reviewed, objective, transparent discussion about CO2," Pruitt said.

Pruitt voiced support for a "red team-blue team" exercise to foster such a discussion. The red-blue team concept gained prominence in a Wall Street Journal commentary by Steven Koonin, a professor at New York University.

Koonin argued that such an exercise would subject the scientific consensus on climate change to a rigorous test. The red team would challenge consensus findings from scientific assessments, and the blue team would have the opportunity to respond.

"The outcome of a Red/Blue exercise for climate science is not preordained, which makes such a process all the more valuable," Koonin wrote. "It could reveal the current consensus as weaker than claimed. Alternatively, the consensus could emerge strengthened if Red Team criticisms were countered effectively."

Pruitt said such an exercise would improve an understanding of what we know and don't know about carbon dioxide and the health risks it poses to United States and the world. "The American people need to have that type of honest, open discussion, and it's something we hope to provide as part of our leadership," he said.

For his part, Pruitt has voiced skepticism about the human role in climate change, saying he does not believe that carbon dioxide is a "primary contributor."

Historically, red teams have been called upon in military exercises as a way to introduce alternative ideas and, ultimately, strengthen organizational performance. But David Titley, a climate scientist at Penn State University and retired rear admiral in the Navy, said introducing a red team into climate science doesn't make sense. "Science already has a red team: peer review," he said.

The peer review process allows any scientist to submit their work. The submission is then evaluated by other scientists on its merits, and published if deemed acceptable. Often, scientists must revise their manuscript based on reviewer comments before it is published. Most academic journals also allow scientists to submit critical comments on published studies which are printed if insightful.

A study of the peer-reviewed literature found that 97 percent of published papers support the consensus view that human activities are responsible for the majority of recent climate warming.

Peter Frumhoff, director of science and policy for the Union of Concerned Scientists, said introducing a red team is an act of false equivalence — giving more prominence to alternative ideas than they have earned in the refereed journal process.

"The notion that we would need to create an entirely different new approach, in particular for the specific question around global warming, is unfounded and ridiculous and simply intended to promote the notion of a lack of consensus about the core findings, which in fact is a false notion," he told The Post's Chelsea Harvey.

Pruitt's call for a red-blue team dual has been promoted by two scientists outside the mainstream, unconvinced of the risks posed by climate change.

John Christy, an atmospheric scientist at the University of Alabama in Huntsville, said in prepared testimony at a House Science Committee hearing in March that a red team "would offer to Congress some very different conclusions regarding the human impacts on climate."

Judith Curry, professor emeritus at Georgia Tech's School of Earth and Atmospheric Sciences, also expressed support for the idea in congressional testimony. On her blog, she elaborated on its potential benefits:

Such an exercise, as pointed out by Koonin, would strengthen climate science, improve public understanding of science, better inform the policy process, and would publicly demonstrate scientific reasoning and argument.

If the 'consensus' is really as strong as they think it is, then the 'consensus' scientists have nothing to lose in such an exercise — the consensus would emerge as strengthened.

But Marshall Shepherd, a professor of atmospheric science at the University of Georgia, called the red-blue team concept a "gimmick." He said skeptics who complain about not being heard have ample opportunity to express their ideas through journal submissions and at scientific meetings. "This just feels to me a like another way to skirt the tried and true scientific process that has worked for years in our field and many others," he said.

Pruitt's call for a review of key climate-change science findings, after pulling out of the Paris Climate agreement, is, in some ways, reminiscent of the actions of former president George W. Bush 16 years prior.

After pulling out of the Kyoto Protocol, in March 2001, the Bush White House also sought a review of climate-change science — although the science was more uncertain then than it is now. In May of that year, it asked the National Academy of Sciences for "assistance in identifying the areas in the science of climate change where there are the greatest certainties and uncertainties."

In response, the National Academies — a body set up to provide objective scientific advice — published the 2001 expert assessment "Climate Change: An Analysis of Some Key Questions." That report, prepared by a diverse group of climate scientists, concluded that the planet was warming, humans were likely contributing and that warming posed risks.

Here are two key excerpts from that report:

Greenhouse gases are accumulating in Earth's atmosphere as a result of human activities, causing surface air temperatures and subsurface ocean temperatures to rise. Temperatures are, in fact, rising. The changes observed over the last several decades are likely mostly due to human activities, but we cannot rule out that some significant part of these changes is also a reflection of natural variability. Human-induced warming and associated sea level rises are expected to continue through the 21st century.

. . .

Global warming could well have serious adverse societal and ecological impacts by the end of this century, especially if globally-averaged temperature increases approach the upper end of the IPCC projections.

Since 2001, the planet has experienced its three warmest years on record, and multiple subsequent reports from the National Academies, the United Nations' Intergovernmental Panel on Climate Change, and U.S.

government have found the case for human-induced climate change has only grown stronger.

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